



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/661,195	09/13/2000	Tomoaki Hokao	Q60810	7594
7590 12/02/2004			EXAMINER	
Sughrue Mion Zinn Macpeak & Seas 2100 Pennsylvania Avenue N W Washington, DC 20037-3202			MOORE, IAN N	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/661,195

Applicant(s)

HOKAO, TOMOAKI

Examiner

Ian N Moore

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on the amendment filed on 31 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 11-21, 25-35, 39-47, 49-52 and 54-57 is/are rejected.
- 7) ☒ Claim(s) 8-10, 22-24, 36-38, 48 and 53 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This is in response to amendment filed on 8-31-2004.
2. Claims 1-7,11-21,25-35,39-47,49-52 and 54-57 are rejected by the same ground of rejections.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1, 15 and 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Losh (U.S. 6,173,181) in view of Leung (U.S. 5,623,535).

Regarding Claims 1, 15, and 29, Losh discloses a mobile communication terminal equipment (see Fig. 4, a subscriber unit 50) for a CDMA cellular phone system (see col. 7, line 40-41; CDMA cellular communication system), a control method for cell detection, and a recording medium (see FIG. 4, Memory 58) recording a program for a control method, comprising:

detection means (see FIG. 4, Scanner 66 which couples to antenna 54; note that the scanner must detects/identifies/notices/senses the codes via antenna before it scans) for performing cell detection by detecting scramble codes (i.e. neighborhood cell code identifiers, note that it is well known in the art that the codes must be scrambled/encrypted in

order to uniquely and securely identify the cell before sending over the air interface) of a visiting cell and neighboring cell (see Fig. 4, neighbor scan list 68 contains a neighbor cell list, which comprises a combined list of the visiting and neighboring cells; see col. 7, line 65 to col. 8, line 3; and col. 4, line 40-56; note that the scanner measures/detects the characteristic of received signal from other cells (i.e. neighbors and visiting cells), and each cell is identified by their identification (i.e. scrambling/encrypted identification codes));

memory means (see FIG. 4, Memory 58) for storing a scramble code (see FIG.4, Candidate scan list 60 and mode instructions 62; see col. 7, line 42-45; a plurality of neighbor scan lists which are sorted per preference (i.e. candidate scan lists) are stored in the memory; thus, it is clear that each neighbor list must contain an identification code (i.e. scrambling/encrypted codes) in order to identify each neighboring cell.);

control means (see FIG.4, Controller 56) for controlling to write the scramble codes of the visiting cell and neighboring cell, detected by said detection means, into said memory means (see col. 7, line 42-45; note that the controller stores/writes a plurality of detected/identified/noticed/sensed neighbor scan lists in the memory); and

measurement means (see FIG. 4, Scanner 66; note that the scanner must calculate/determine/measure the codes in order to scan) for measuring detection of frequencies of the scramble codes (see Fig. 4, candidate neighbor scan list (i.e. the candidate list which consists of scanned neighboring cells) contains the number/frequency of each encrypted/scrambled scanned cell code/identification; see col. 5, line 40-55).

Losh does not explicitly disclose measuring detection of intra-cell stay times.

However, the above-mentioned claimed limitations are taught by Leung. In particular, Leung

Art Unit: 2661

teaches measuring detection of intra-cell stay times (see FIG. 2, step 120 and see FIG. 3A, the mobile unit measures/collects/stores the amount of time it spends in a each cell; see col. 2, line 19-24).

In view of this, having the system of Losh and then given the teaching of Leung, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Losh, by providing a mechanism of a mobile station measuring/collecting the amount of time it spends in each cell, as taught by Leung. The motivation to combine is to obtain the advantages/benefits taught by Leung since Leung states at col. 1, line 45-48 that such modification would provide an improved arrangement for controlling the operation of cellular system which makes efficient use of network resources.

5. Claims 2-4, 16-21, 30-35, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Losh in view of Leung, as described above in claims 1, 15 and 29, and further in view of Seppanen (U.S. 5,903,832).

Regarding Claims 2, 16, and 30, the combined system of Losh and Leung discloses all aspects of the claimed invention set forth in the rejection of Claims 1, 15, and 29 as described above.

Neither Losh nor Leung explicitly discloses storing the codes in said memory means in response to user operation. However, the above-mentioned claimed limitations are taught by Seppanen. In particular, Seppanen teaches storing the codes (see Fig. 24, plurality of data blocks 25₁-25_n; see col. 5, line 66 to col. 5, line 9; note that various cellular system parameter and the number assignments identifies each network (i.e. a network/cell code)) in said memory means in response to user operation (see Fig. 3A, and 4B; col. 4, line 16-53; each

user has a capability to “manually” select and store the preferred system parameters (i.e. network/cell site) in the memory (see Fig. 24, Memory 24) of a mobile station.)

In view of this, having the combined system of Losh and Leung, and then given the teaching of Seppanen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Losh and Leung, by providing a mechanism for a user to select and store preferred cell site/network, as taught by Seppanen. The motivation to combine is to obtain the advantages/benefits taught by Seppanen since Seppanen states at col. 3, line 40-45 that such modification would make it possible to provide an efficient and simple technique for enabling a user of a mobile terminal or station to manage, prioritize, and select between available systems.

Regarding Claims 3, 17, and 31, the combined system of Losh and Leung discloses all aspects of the claimed invention set forth in the rejection of Claims 1, 15, and 29 as described above.

Nether Losh nor Leung explicitly discloses automatically store the codes in said memory means. However, the above-mentioned claimed limitations are taught by Seppanen. In particular, Seppanen teaches automatically store the codes (see Fig. 24, plurality of data blocks 25₁-25_n; see col. 5, line 66 to col. 5, line 9; note that various cellular system parameter and the number assignments identifies each network (i.e. a network/cell code)) in said memory means (see col. 3, line 15-30; and col. 4, line 5-29; the mobile station automatically stores various network/cell sites in the in the memory (see Fig. 24, Memory 24).)

In view of this, having the combined system of Losh and Leung, and then given the teaching of Seppanen, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to modify the combined system of Losh and Leung, by providing a mechanism for a mobile station to automatically store the cell sites/networks, as taught by Seppanen. The motivation to combine is to obtain the advantages/benefits taught by Seppanen since Seppanen states at col. 3, line 45-50 that such modification would make it possible to provide a mobile terminal or station to have automatic network selection capability and temporary network selection capability by network name.

Regarding Claims 4, 18 and 32, the combined system of Losh and Leung discloses all aspects of the claimed invention set forth in the rejection of Claims 1, 15, and 29 as described above.

Neither Losh nor Leung explicitly discloses automatically store the codes in said memory means. However, the above-mentioned claimed limitations are taught by Seppanen. In particular, Seppanen teaches automatically store the codes (see Fig. 24, plurality of data blocks 25₁-25_n; see col. 5, line 66 to col. 5, line 9; note that various cellular system parameter and the number assignments identifies each network (i.e. a network/cell PN code)) in said memory means (see col. 3, line 15-30; and col. 4, line 5-29; the mobile station automatically stores various network/cell sites in the in the memory (see Fig. 24, Memory 24).)

In view of this, having the combined system of Losh and Leung, and then given the teaching of Seppanen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Losh and Leung, by providing a mechanism for a mobile station to automatically store the cell sites/networks, as taught by Seppanen, for the same motivation as stated above in Claim 3, 17, and 31.

Regarding Claims 5, 19, 33 and 43, the combined system of Losh and Leung discloses all aspects of the claimed invention set forth in the rejection of Claims 1, 4, 15 and 29 as described above.

Neither Losh nor Leung explicitly discloses storing the codes in the memory means upon assigning priorities. However, the above-mentioned claimed limitations are taught by Seppanen. In particular, Seppanen teaches storing the codes (see Fig. 24, plurality of data blocks 25₁-25_n; see also col. 5, line 66 to col. 5, line 9; note that various cellular system parameter and the number assignments identifies each network (i.e. a network/cell code)) in the memory means upon assigning priorities (see col.3, line 1-30; col. 4, line 5-29; the mobile station automatically prioritizes various network/cell sites (i.e. home area being a higher priority than others) in the memory (see Fig. 24, Memory 24), or the user manually prioritizes various network/cell sites by selecting and storing in the memory.)

In view of this, having the combined system of Losh and Leung, and then given the teaching of Seppanen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Losh and Leung, by providing a mechanism for a mobile station to automatically store the cell sites/networks according to the priorities, as taught by Seppanen. The motivation to combine is to obtain the advantages/benefits taught by Seppanen since Seppanen states at col. 3, line 45-50 that such modification would make it possible to provide a mobile terminal or station to have automatic network selection capability and temporary network selection capability by network name and a capability for setting parameters and priorities of networks.

Regarding Claims 6, 20 and 34, the combined system of Losh and Leung discloses all aspects of the claimed invention set forth in the rejection of Claims 1, 5, 15, 19, 29, and 33.

Neither Losh nor Leung explicitly discloses detection by preferentially using the codes stored in the memory means. However, the above-mentioned claimed limitations are taught by Seppanen. In particular, Seppanen teaches performing cell detection by preferentially using the codes (see Fig. 24, plurality of data blocks 25₁-25_n; see also col. 5, line 66 to col. 5, line 9; note that various cellular system parameter and the number assignments identifies each network (i.e. cell site);) stored in the memory means (see col.3, line 1-30; col. 4, line 29-53 and col. 7, line 54 to col. 8, line 50; the user manually prioritizes various network/cell sites by selecting/preferring and storing in the memory. Once the user stores the selected/preferred cell/network in the memory, the mobile station performs cell detection and registration according to the list of selected/preferred cell or network site.)

In view of this, having the combined system of Losh and Leung, and then given the teaching of Seppanen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Losh and Leung, by providing a mechanism for a mobile station to performs cell detection and registration according to the selected/preferred cell/network site, as taught by Seppanen. The motivation to combine is to obtain the advantages/benefits taught by Seppanen since Seppanen states at col. 3, line 45-50 that such modification would make it possible to enable a user of a mobile terminal or station to manage, prioritize, and select between available systems.

Regarding Claims 7, 21 and 35, the combined system of Losh and Leung discloses all aspects of the claimed invention set forth in the rejection of Claims 1, 5, 6, 15, 19, 20, 29, 33, and 34 as described above. Losh discloses a plurality of codes, stored in the memory means (see FIG. 4, a list 60 is stored in the memory 58).

Neither Losh nor Leung explicitly discloses a plurality of codes, stored in the memory means, in the descending order of priorities. However, the above-mentioned claimed limitations are taught by Seppanen. In particular, Seppanen teaches a plurality of codes (see Fig. 24, plurality of data blocks 25₁-25_n; see also col. 5, line 66 to col. 5, line 9; note that various cellular system parameter and the number assignments identifies each network (i.e. cell site)), stored in the memory means, in the descending order of priorities (col. 4, line 16-28; the cell/network site list stored in the memory is prioritized is such as way that the higher the level on the list, the higher the priorities (i.e. the high priority to low priority on the list), and thus it is prioritized in descending order.)

In view of this, having the system of Losh and then given the teaching of Seppanen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Losh, by providing a mechanism for a mobile station to store the cell sites/networks according by priorities from high to low, as taught by Seppanen, for the same motivation that stated above in Claims 5, 19 and 33.

6. Claims 11, 12, 25, 26, 39, 40, 49, 50, 54 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Losh in view of Leung and Seppanen as applied to claims 6, 20, and 34 above, and further in view of Nystrom (U.S. 6,526,091).

Regarding claims 11, 25, 39, 49, 50, 54, and 55, the combined system of Losh, Leung and Seppanen discloses wherein the detection step comprises the step of performing cell detection by preferentially using a scramble code which is stored in the memory means as stated above in Claims 6,20, and 34.

Neither Losh, Leung, nor Seppanen explicitly discloses specifying a scramble code group at the time of detection of the scramble code, and the step of performing cell detection by using a scramble code, which belongs to the specified scramble code group.

However, the above-mentioned claimed limitations are taught by Nystrom'091. In particular, Nystrom'091 teaches specifying a scramble code group at the time of detection of the scramble code, and the step of performing cell detection by using a scramble code, which belongs to the specified scramble code group (see col. 3, line 29 to col. 4, line 9; note that MS or remote terminal detects/searches and identifies one or more BSs (or cells sites) utilizing scrambling code groups which are assigned to the scrambling codes).

In view of this, having the combined system of Losh, Leung and Seppanen, then given the teaching of Nystrom'091, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Losh, Leung and Seppanen, by providing a mechanism to detect/search scrambling code groups which are assigned to each scrambling codes before searching each individual scrambling code, as taught by Nystrom'091. The motivation to combine is to obtain the advantages/benefits taught by Nystrom'091 since Nystrom'091 states at col. 3, line 29-44 that such modification would make it possible to efficiently help search/synchronize the remote terminal to the BS

and identify the BS-specific scrambling code and improves such synchronization channels in terms of both performance and MS complexity.

Regarding claims 12, 26, and 40, the combined system of Losh, Leung and Seppanen discloses wherein the detection step comprises the step of performing cell detection in accordance with a priority of a scramble code, which is stored in the memory means as stated above in claims 6, 21, 35, and 36.

Neither Losh, Leung, nor Seppanen explicitly discloses specifying a scramble code group at the time of detection of the scramble code, and the step of performing cell detection by using a scramble code, which belongs to the specified scramble code group. However, the above-mentioned claimed limitations are taught by Nystrom'091. In particular, Nystrom'091 teaches specifying a scramble code group at the time of detection of the scramble code, and the step of performing cell detection by using a scramble code, which belongs to the specified scramble code group (see col. 3, line 29 to col. 4, line 9; note that MS or remote terminal detects/searches and identifies one or more BSs (or cells sites) utilizing scrambling code groups which are assigned to the scrambling codes).

In view of this, having the combined system of Losh, Leung and Seppanen, then given the teaching of Nystrom'091, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Losh, Leung and Seppanen, by providing a mechanism to detect/search scrambling code groups which are assigned to each scrambling codes before searching each individual scrambling code, as taught by Nystrom'091 for the same motivation as stated above in claims 11, 25 and 39.

Art Unit: 2661

7. Claims 13, 14, 27, 28, 41, 42, 44-47, 51, 52, 56 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Losh in view of Leung, as applied to claims 1, 15 and 29 above, and further in view of and Seppanen and Nystrom (U.S. 6,526,091).

Regarding claims 13, 27, 41, 44 and 45, the combined system of Losh, Leung discloses wherein the detection means is configured to specify a scramble code at the time of detection of a neighboring cell in a handover state (see Losh, see col. 6, lines 42-50). Losh also discloses storing a scramble code of the neighboring cell in said memory means as described above in claims 1, 15 and 29.

Neither Losh nor Leung explicitly discloses detection by preferentially using the codes stored in the memory means. However, the above-mentioned claimed limitations are taught by Seppanen. In particular, Seppanen teaches performing cell detection by preferentially using the codes (see Fig. 24, plurality of data blocks 25₁-25_n; see also col. 5, line 66 to col. 5, line 9; note that various cellular system parameter and the number assignments identifies each network (i.e. cell site);) stored in the memory means (see col. 3, line 1-30; col. 4, line 29-53 and col. 7, line 54 to col. 8, line 50; the user manually prioritizes various network/cell sites by selecting/preferring and storing in the memory. Once the user stores the selected/preferred cell/network in the memory, the mobile station performs cell detection and registration according to the list of selected/preferred cell or network site.)

In view of this, having the combined system of Losh and Leung, and then given the teaching of Seppanen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Losh and Leung, by providing a mechanism for a mobile station to performs cell detection and registration

Art Unit: 2661

according to the selected/preferred cell/network site, as taught by Seppanen. The motivation to combine is to obtain the advantages/benefits taught by Seppanen since Seppanen states at col. 3, line 45-50 that such modification would make it possible to enable a user of a mobile terminal or station to manage, prioritize, and select between available systems.

Neither Losh, Leung, nor Seppanen explicitly discloses specifying a scramble code group at the time of detection of the scramble code, and the step of performing cell detection by using a scramble code, which belongs to the specified scramble code group.

However, the above-mentioned claimed limitations are taught by Nystrom'091. In particular, Nystrom'091 teaches specifying a scramble code group at the time of detection of the scramble code, and the step of performing cell detection by using a scramble code, which belongs to the specified scramble code group (see col. 3, line 29 to col. 4, line 9; note that MS or remote terminal detects/searches and identifies one or more BSs (or cells sites) utilizing scrambling code groups which are assigned to the scrambling codes).

In view of this, having the combined system of Losh, Leung and Seppanen, then given the teaching of Nystrom'091, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Losh, Leung and Seppanen, by providing a mechanism to detect/search scrambling code groups which are assigned to each scrambling codes before searching each individual scrambling code, as taught by Nystrom'091. The motivation to combine is to obtain the advantages/benefits taught by Nystrom'091 since Nystrom'091 states at col. 3, line 29-44 that such modification would make it possible to efficiently help search/synchronize the remote terminal to the BS

and identify the BS-specific scrambling code and improves such synchronization channels in terms of both performance and MS complexity.

Regarding claims 14,28,42,46,47,51,52,56 and 57, the combined system of Losh and Leung discloses wherein said control means performs control using a scramble/encrypted code and storing scramble code in memory means as described above in claims 1, 15 and 29 above.

Neither Losh nor Leung explicitly discloses detection by preferentially using the codes stored in the memory means. However, the above-mentioned claimed limitations are taught by Seppanen. In particular, Seppanen teaches performing cell detection by preferentially using the codes (see Fig. 24, plurality of data blocks 25₁-25_n; see also col. 5, line 66 to col. 5, line 9; note that various cellular system parameter and the number assignments identifies each network (i.e. cell site);) stored in the memory means (see col.3, line 1-30; col. 4, line 29-53 and col. 7, line 54 to col. 8, line 50; the user manually prioritizes various network/cell sites by selecting/preferring and storing in the memory. Once the user stores the selected/preferred cell/network in the memory, the mobile station performs cell detection and registration according to the list of selected/preferred cell or network site.)

In view of this, having the combined system of Losh and Leung, and then given the teaching of Seppanen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Losh and Leung, by providing a mechanism for a mobile station to performs cell detection and registration according to the selected/preferred cell/network site, as taught by Seppanen. The motivation to combine is to obtain the advantages/benefits taught by Seppanen since Seppanen states at

col. 3, line 45-50 that such modification would make it possible to enable a user of a mobile terminal or station to manage, prioritize, and select between available systems.

Neither Losh, Leung, nor Seppanen explicitly discloses specifying a scramble code group by using a scramble code group to which a scramble code stored, when said detection means specifies a scramble code group.

However, the above-mentioned claimed limitations are taught by Nystrom'091. In particular, Nystrom'091 teaches specifying a scramble code group by using a scramble code group to which a scramble code stored, when said detection means specifies a scramble code group (see col. 3, line 29 to col. 4, line 9; note that MS or remote terminal first detects/searches and identifies/specifies one or more BSs (or cells sites) utilizing scrambling code groups which are assigned to the scrambling codes in order to specify/identify any particular scramble code stored in each group memory). Also, it is well known in the art of searching mechanism in memory structure; first one must preferentially search a group name (i.e. a file folder name) of any particular member, ID, name, or code (i.e. a file name), since each group is uniquely identified by each group category. Once the group is identified, any particular member, ID, name, or code is searched and identified.

Similar scenario applies to memory searching mechanism of Losh, Leung, and Seppanen and Nystrom'091. First, a scramble group is preferentially searched/specified in the list of scramble code groups when searching/specifying any particular scramble code. In view of this, having the combined system of Losh, Leung and Seppanen, then given the teaching of Nystrom'091, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Losh, Leung and

Art Unit: 2661

Seppanen, by providing a mechanism to detect/search scrambling code groups which are assigned to each scrambling codes before searching each individual scrambling code, as taught by Nystrom'091. The motivation to combine is to obtain the advantages/benefits taught by Nystrom'091 since Nystrom'091 states at col. 3, line 29-44 that such modification would make it possible to efficiently help search/synchronize the remote terminal to the BS and identify the BS-specific scrambling code and improves such synchronization channels in terms of both performance and MS complexity. Also, the motivation to combine is to obtain the advantages/benefits taught by well established teaching in art since well established teaching in art teaches that such modification would make it possible to increase the speed of searching any particular file/item in the memory, by first preferentially searching/specifying a group/folder,

Allowable Subject Matter

8. Claims 8-10, 22-24, 36-38, 48, and 53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments, regarding 1-7, 11-21, 25-35, 39-47, 49-52, 54-57, filed 8-31-2004 have been fully considered but they are not persuasive.

Regarding claims 1, 15 and 29, the applicant argued that, "...the combined of references fails to teach or suggest at least performing cell detection by detecting scramble

Art Unit: 2661

coeds of a visiting cell and neighboring cell...controlling to write the detected scramble codes in memory..." in page 3, 1st paragraph.

In response to applicant's argument, the examiner respectfully disagrees that the combined of references fails to teach or suggest at least performing cell detection by detecting scramble coeds of a visiting cell and neighboring cell, and controlling to write the detected scramble codes in memory.

Losh discloses detection means (see **FIG. 4, Scanner 66 which couples to antenna 54; note that the scanner must detects/identifies/notices/senses the codes via antenna before it scans**) for performing cell detection by detecting scramble codes (i.e. neighborhood cell code identifiers, note that it is well known in the art that the codes must be scrambled/encrypted in order to uniquely and securely identify the cell before sending over the air interface) of a visiting cell and neighboring cell (see Fig. 4, neighbor scan list 68 contains a neighbor cell list, which comprises a combined list of the visiting and neighboring cells; see col. 7, line 65 to col. 8, line 3; and col. 4, line 40-56; note that the scanner measures/detects the characteristic of received signal from other cells (i.e. neighbors and visiting cells), and each cell is identified by their identification (i.e. scrambling/encrypted identification codes)), and control means (see **FIG.4, Controller 56**) for controlling to write the scramble codes of the visiting cell and neighboring cell, detected by said detection means, into said memory means (see col. 7, line 42-45; note that the controller stores/writes a plurality of detected/identified/noticed/sensed neighbor scan lists in the memory).

Note that the scanner 66 performs the measuring and scanning function. In order to perform scanning and measuring function, the scanner must detect/identify/notice/sense the code so that scanner can identify the scanned/detected/measured code in accordance with neighbor scan list 68 (which contains a list of visiting and neighboring cells). Thus, it is clear that Losh teaches performing cell detection by detecting scramble codes of a visiting cell and neighboring cell. Also, controller 56 stores/writes the detected/identified/noticed/sensed codes, which represents neighbor and visiting cells, into the memory 50. Thus, it is clear that Losh discloses writing/storing detected scramble codes, which represents neighbor and visiting cells, in memory.

Regarding claims 2,6 and 30, The applicant argued that, "...the combination of references fails to teach or suggest at least performing control so as to store scramble codes in memory in response to a user operation..." in page 4, 2nd paragraph.

In response to applicant's argument, the examiner respectfully disagrees that the combination of references fails to teach or suggest at least performing control so as to store scramble codes in memory in response to a user operation.

Losh teaches performing control so as to store scramble codes in said memory (see col. 7, lines 42-45). Seppanen teaches storing the codes (**see Fig. 24, plurality of data blocks 25₁-25_n; see col. 5, line 66 to col. 5, line 9; note that various cellular system parameter and the number assignments identifies each network (i.e. a network/cell code))** in said memory means in response to user operation (**see Fig. 3A, and 4B; col. 4, line 16-53; each user has a capability to "manually" select and store the preferred system**

parameters (i.e. network/cell site) in the memory (see Fig. 24, Memory 24) of a mobile station.)

Note that, as disclosed in Seppanen FIG. 3A and 4B, the user is able to select the preferred system parameter (i.e. network/cell site). Per Seppanen FIG. 24, memory 24, keypad input and controller 18, it is clear that when user selects the preferred network system, the keypad input is stored in the memory 24 by the controller 18. Thus, it is clear that the combined system of Losh, Leung and Seppanen discloses performing control so as to store scramble codes in memory in response to a user operation.

Regarding claims 3, 17 and 31, the applicant argued that, "...the combination of references fails to teach or suggest at least automatically storing scramble codes in memory in accordance with the detection frequencies of the scramble codes control..." in page 4, 4th paragraph and page 5, 1st paragraph.

In response to applicant's argument, the examiner respectfully disagrees that the combination of references fails to teach or suggest at least automatically storing scramble codes in memory in accordance with the detection frequencies of the scramble codes control.

Losh teaches performing control so as to store scramble codes in said memory (see col. 7, lines 42-45) and measuring (see FIG. 4, Scanner 66) detection frequencies of the scramble codes storing in said memory (see Fig. 4, candidate neighbor scan list (i.e. the candidate list which consists of scanned neighboring cells) in the memory 58 contains the number/frequency of each encrypted/scrambled scanned cell code/identification; see col. 5, line 40-55). Seppanen'832 teaches automatically store the codes (see Fig. 24, plurality of data blocks 25₁-25_n; see col. 5, line 66 to col. 5, line 9; note that various

cellular system parameter and the number assignments identifies each network (i.e. a network/cell code)) in said memory means (see col. 3, line 15-30; and col. 4, line 5-29; the mobile station automatically stores various network/cell sites in the in the memory (see Fig. 24, Memory 24).)

Note that, as described above, Seppanen discloses automatic storing process, which requires no user involvement. Losh discloses measuring and storing frequencies of scramble codes. Also, it is inherent that when the data (i.e. scramble code) is stored in the memory, it must be stored according to the identification number (i.e. frequency) so that one can easily retrieved such stored. For example, for saving a file in the computer, one must give an identification (i.e. file name/number) to the stored data so that it can be retrieved at later time; or storing data in the memory table, one must give an identification to each stored data so that one can identified when retrieving. Thus, the combined system of Losh, Leung and Seppanen discloses automatically storing scramble codes in memory in accordance with the identification, which is detection frequencies of the scramble codes.

Regarding claims 3, 17 and 31, the applicant argued that, "...examiner provides no motivation or suggestion in the cited reference showing that the claimed limitation would be obvious..." in page 5, 2nd paragraph.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837

F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as recited in the previous office action, the motivation to combine is to obtain the advantages/benefits taught by Seppanen'832 since Seppanen'832 states at col. 3, line 45-50 that such modification would make it possible to provide a mobile terminal or station to have automatic network selection capability and temporary network selection capability by network name.

Regarding claims 4, 18 and 32, the applicant argued that, "...the combination of references fails to teach or suggest at least automatically storing scramble codes in memory in accordance with intra-cell stay time..." in page 5, 3rd and 4th paragraph.

In response to applicant's argument the examiner respectfully disagrees that the combination of references fails to teach or suggest at least automatically storing scramble codes in memory in accordance with intra-cell stay time.

Losh teaches performing control so as to store scramble codes in said memory (see col. 7, lines 42-45). Leung'535 teaches measuring detection of intra-cell stay times (see **FIG. 2, step 120 and see FIG. 3A, the mobile unit measures/collects/stores the amount of time it spends in a each cell; see col. 2, line 19-24**). Seppanen'832 teaches automatically store the codes (see Fig. 24, plurality of data blocks 25₁-25_n; see col. 5, line 66 to col. 5, line 9; note that various cellular system parameter and the number assignments identifies each network (i.e. a network/cell code)) in said memory means (see col. 3, line 15-30; and col. 4, line 5-29; the mobile station automatically stores various network/cell sites in the in the memory (see Fig. 24, Memory 24).) Also, it is inherent that when the data (i.e. scramble code) is stored in the memory, it must be stored according to the identification (i.e. stay

times) so that one can easily retrieve such stored. For example, for saving a file in the computer, one must give an identification (i.e. file name/number) to the stored data so that it can be retrieved at later time; or storing data in the memory table, one must give a identification to each stored data so that one can identify when retrieving. Thus, the combined system of Losh, Leung and Seppanen discloses automatically storing scramble codes in memory in accordance with the identification, which is intra-cell stay times.

Regarding claims 4, 18 and 32, the applicant argued that, "...Seppanen fails to teach or suggest measuring or determining intra-cell stay time...automatically storing codes according to intra-cell stay time...examiner has provided no motivation or suggestion in the cited references showing that the claimed limitation would be obvious..." page 6, 1st paragraph.

In response to applicant's argument, as recited above respond and in the previous office action, Leung teaches measuring or determining intra-cell stay time, and Seppanen teaches codes/data storing automatically in the memory. The combined system of Losh, Leung and Seppanen discloses automatically storing scramble codes in memory in accordance with the identification, which is intra-cell stay times.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining

or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine is to obtain the advantages/benefits taught by Seppanen since Seppanen states at col. 3, line 45-50 that such modification would make it possible to provide a mobile terminal or station to have automatic network selection capability and temporary network selection capability by network name.

Regarding claims 6,7,20,21,34 and 35, the applicant argued that, "...the combination of references fails to teach or suggest at least performing cell detection by preferentially using scramble codes stored in memory..." page 6, 2nd paragraph.

In response to applicant's argument the examiner respectfully disagrees that the combination of references fails to teach or suggest at least performing cell detection by preferentially using scramble codes stored in memory.

Losh discloses detection means (see FIG. 4, Scanner 66 which couples to antenna 54; note that the scanner must detects/identifies/notices/senses the codes via antenna before it scans) for performing cell detection by detecting scramble codes (i.e. neighborhood cell code identifiers, note that it is well known in the art that the codes must be scrambled/encrypted in order to uniquely and securely identify the cell before sending over the air interface). Seppanen teaches performing cell detection by preferentially using the codes (see Fig. 24, plurality of data blocks 25₁-25_n; see also col. 5, line 66 to col. 5, line 9; note that various cellular system parameter and the number

assignments identifies each network (i.e. cell site);) stored in the memory means (see col.3, line 1-30; col. 4, line 29-53 and col. 7, line 54 to col. 8, line 50; the user manually prioritizes various network/cell sites by selecting/preferring and storing in the memory. Once the user stores the selected/preferred cell/network in the memory, the mobile station performs cell detection and registration according to the list of selected/preferred cell or network site.) Thus, the combined system of Losh, Leung and Seppanen discloses performing cell detection by preferentially using scramble codes stored in memory.

Regarding claims 6,7,20,21,34 and 35, the applicant argued that, "... Seppanen fails to teach or suggest performing cell detection...or of detecting a cell by using scramble codes stored in memory, or by using scramble codes in memory according to the descending order of priorities..." in page 6, 3rd paragraph.

In response to applicant's argument the examiner respectfully disagrees that Seppanen fails to teach or suggest performing cell detection...or of detecting a cell by using codes stored in memory, or by using codes in memory according to the descending order of priorities.

Seppanen teaches performing cell detection by preferentially using the codes stored in the memory means, as described in above response. Losh discloses detection means for performing cell detection by detecting scramble codes, as described in above response. Seppanen teaches a plurality of codes (see Fig. 24, plurality of data blocks 25₁-25_n; see also col. 5, line 66 to col. 5, line 9; note that various cellular system parameter and the number assignments identifies each network (i.e. cell site)), stored in the memory means,

in the descending order of priorities (**col. 4, line 16-28; the cell/network site list stored in the memory is prioritized is such as way that the higher the level on the list, the higher the priorities (i.e. the high priority to low priority on the list), and thus it is prioritized in descending order.**) Thus, combined system of Losh, Leung and Seppanen discloses performing cell detection...or of detecting a cell by using scramble codes stored in memory, or by using scramble codes in memory according to the descending order of priorities.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Regarding claims 12,26, and 40, the applicant argued that, "...combination of references fails to teach or suggest at least performing code group stored in memory...there is no teaching or suggestion that there is any priority of scramble codes within a group or that cell detection is performed according to such priority " page 7, 1st paragraph.

In response to applicant's argument the examiner respectfully disagrees that combination of references fails to teach or suggest at least performing code group stored in memory. Nystrom teaches performing cell detection by using a scramble code, which belongs to the specified scramble code group (**see col. 3, line 29 to col. 4, line 9; note that MS or remote terminal detects/searches and identifies one or more BSs (or cells sites) utilizing scrambling code groups which are assigned to the scrambling codes**). Seppanen discloses wherein the detection step comprises the step of performing cell detection in accordance with a priority of a scramble code, which is stored in the memory means as

Art Unit: 2661

recited in above responses. Thus, the combined system of Losh, Leung, Seppanen and Nystrom discloses performing code group stored in memory and priority of scramble codes within a group or that cell detection is performed according to such priority.

In view of the above, **the examiner respectfully disagrees** with applicant's argument and believes that the combination of references as set forth in the 103 rejections is proper, for at least the reasons discussed above.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2661

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N Moore whose telephone number is 571-272-3085. The examiner can normally be reached on M-F: 8:30 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

INM
11/24/04



BRIAN NGUYEN
PRIMARY EXAMINER